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09/774,963	01/31/2001	Joel M. Soderberg	13768.168	6016

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EXAMINER	
PATEL, ASHOKKUMAR B	

ART UNIT	PAPER NUMBER
2154	3

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/774,963	SODERBERG ET AL.	
	Examiner	Art Unit	
	Ashok B. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-34 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-34 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Application Number 09/774, 963 was filed on 1/31/2001. Claims 1-34 are subject to examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-24 and 27-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (hereinafter Lee)(US 6,336,137).

Referring to claim 1,

The reference Lee teaches:

In a system that includes a client system in communication with a server system having a front-end server (Fig. 3, element 51) and one or more back-end servers (Fig. 3, elements 61, 71), wherein the client system (Fig. 3, element 41) requests content that is available on the one or more back-end servers (Fig.3, elements 79, 75) through the front-end server, and wherein the content may include resource identifiers that are specific to a particular communication protocol (col. 3, lines 43-44), a method of mapping a connection between a client system and a front-end server to a connection between a front-end server and a back-end server, the method comprising the front-end server performing:

an act of receiving a request for content from the client system, the request being received in accordance; with a first communication protocol; (col.3, lines 40-46)

an act of identifying a particular back-end server where the content is available; (col.3, lines 45-46) an act of adding protocol information to the request for content, the protocol information identifying the first communication protocol; and an act of sending the request for content to the particular back-end server, the request being sent in accordance with a second communication protocol. (col. 3, lines 47-48).

Referring to claim 2,

The reference Lee teaches:

A method as recited in claim I further comprising the act of receiving a response from the particular back-end server in accordance with the second communication protocol, the response including content with one or more resource identifiers that are specific to the first communication protocol. (col. 3, lines 49-55).

Referring to claim 3,

The reference Lee teaches:

A method as recited in claim 2 further comprising the act of sending the response to the client system in accordance with the first communication protocol. (col.3, lines 56-59).

Referring to claim 4,

The reference Lee teaches:

A method as recited in claim 3 wherein the first communication protocol comprises a secure communication protocol, the method further comprising the act of encrypting the content sent to the client system. (col.2, lines 63-67).

Referring to claim 5,

The reference Lee teaches:

A method as recited in claim 2 wherein the one or more resource identifiers are uniform resource locators. (col.3, lines 44-45).

Referring to claims 6 and 23,

The reference Lee teaches:

A method as recited in claim 1 wherein the first communication protocol comprises a secure communication protocol (col.2, lines 63-67) and the second communication protocol comprises an insecure communication protocol. (col. 3, lines 47-48).

Referring to claim 7,

The reference Lee teaches:

A method as recited in claim 6 further comprising the act of decrypting content received from the client system. (Fig. 2, elements 22 and 23) and (col.2, lines 63-67).

Referring to claim 8,

The reference Lee teaches:

A method as recited in claim 6 wherein the first communication protocol comprises a secure sockets layer protocol. (col.2, lines 63-67).

Referring to claims 9, 10 and 11,

The reference Lee teaches:

A method as recited in claim 1 wherein the second communication protocol comprises the hypertext transfer protocol, and wherein the protocol information comprises a hypertext transfer protocol header and, A method as recited in claim 9

wherein the header is one of a "Via:" and a "User-agent:" header. And A method as recited in claim 9, wherein the header comprises "Front-End HTTPS: on". (col.11, lines 56-63).

Referring to claim 12,

The reference Lee teaches:

A method as recited in claim 9 further comprising a hypertext transfer protocol router at the front-end server performing an act of tracking information associated with the client system's request for content. (col.3, lines 56-59).

Referring to claim 13,

The reference Lee teaches:

A method as recited in claim 1 wherein the request for content comprises a request for one of email content and Web content. (col.3, lines 60-63) and (Fig. 2,element 14).

Referring to claim 14,

The reference Lee teaches:

In a system that includes a client system in communication with a server system having a front-end server (Fig. 3, element 51) and one or more back-end servers (Fig. 3, elements 61, 71), wherein the client system (Fig. 3, element 41) requests content that is available on the one or more back-end servers (Fig.3, elements 79, 75) through the front-end server, and wherein the content may include resource identifiers that are specific to a particular communication protocol (col. 3, lines 43-44), a method of mapping a connection between a client system and a front-end server to a connection

between a front-end server and a back-end server, the method comprising the front-end server performing:

a step for communicating with the client system using a first communication protocol, the communicating including a request for content from the client system; (col.3, lines 40-46)

a step for communicating with a particular back-end server using a second communication protocol, the communicating including the request for content from the client system; and(col.3, lines 45-46)

a step for mapping the communication with the client system using the first communication protocol to the communication with the particular back-end server using the second communication protocol, wherein the mapping includes an act of adding protocol information to the request for content that identifies the first communication protocol. (col. 3, lines 47-48).

Referring to claim 15,

The reference Lee teaches:

A method as recited in claim 14 wherein the step for communicating with a particular back-end server using a second communication protocol comprises an act of receiving a response from the particular back-end server, the response including content with one or more resource identifiers that are specific to the first communication protocol. (col. 3, lines 49-55).

Referring to claim 16,

The reference Lee teaches:

A method as recited in claim 15 wherein the one or more resource identifiers are uniform resource locators. (col.3, lines 44-45).

Referring to claim 17,

The reference Lee teaches:

A method as recited in claim 15 wherein the step for communicating with the client system using a first communication protocol comprises an act of sending the response to the client to the client system. (col. 3, lines 56-59).

Referring to claim 18,

The reference Lee teaches:

A method as recited in claim 17 wherein the first communication protocol comprises a secure communication protocol (col.2, lines 63-67) and the second communication protocol comprises an insecure communication protocol. (col. 3, lines 47-48).

Referring to claim 19,

The reference Lee teaches:

A method as recited in claim 18 wherein the step for mapping the communication with the client system using the first communication protocol to the communication with the particular back-end server using the second communication protocol comprises the acts of:

decrypting content received form the client system; (col.11, lines 55-63)

encrypting content sent to the client system; and (col.2, lines 63-67)

tracking information associated with the client system's request for content. (col.3, lines 56-59).

Referring to claims 20 and 21,

The reference Lee teaches:

A method as recited in claim 14 wherein the second communication protocol comprises the hypertext transfer protocol, and wherein the protocol information comprises a hypertext transfer protocol header and, A method as recited in claim 20 wherein the hypertext transfer protocol header comprises "Front-End-HTTPS: on". (col.13, lines 15-24).

Referring to claim 22,

The reference Lee teaches:

In a system that includes a client system in communication with a server system, the server system including a front-end server and one or more back-end servers. Wherein communication between the client system and the front-end server uses a first communication protocol and wherein communication between the front-end server and the one or more back-end servers uses a second communication protocol,(Fig.3) a method of providing content through the front-end server to the client system such that the content complies with the first communication protocol, the method comprising one of the one or more back-end servers performing:

an act of receiving, a request for content from the front-end server, the request for content being received in accordance with the second communication protocol, wherein the request for content includes protocol information identifying the first communication protocol;(col. 13, lines 15-19).

an act of generating the requested content, wherein one or more resource identifiers included in the requested content are specific to the first communication protocol; and an act of sending the requested content to the front-end server in accordance with the second communication protocol. (col.3, lines 47-55).

Referring to claim 24,

24. A method as recited in claim 22, further comprising the front-end server performing:

an act of decrypting the request for content received from the client system; and (col.11, lines 55-63) and (Fig. 2).

an act of encrypting the requested content being sent to the client system. (col.2, lines 63-67) and (Fig. 2).

Referring to claim 27,

Claim 27 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 1. Therefore, claim 27 is rejected for the reasons set forth for the claim 1.

Referring to claim 28,

Claim 28 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 2. Therefore, claim 28 is rejected for the reasons set forth for the claim 2.

Referring to claim 29,

Claim 28 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 3. Therefore, claim 29 is rejected for the reasons set forth for the claim 3.

Referring to claim 30,

Claim 30 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the methods at a front-end server of claims 18 and 19. Therefore, claim 30 is rejected for the reasons set forth for the claims 18 and 19.

Referring to claim 31,

Claim 31 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 5. Therefore, claim 31 is rejected for the reasons set forth for the claim 5.

Referring to claim 32,

Claim 32 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 9. Therefore, claim 32 is rejected for the reasons set forth for the claims 9, 10 and 11.

Referring to claim 33,

Claim 33 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 12. Therefore, claim 33 is rejected for the reasons set forth for the claim 12.

Referring to claim 34,

Claim 34 is a claim to a computer readable medium for carrying machine-executable instructions for implementing the method at a front-end server of claim 13. Therefore, claim 34 is rejected for the reasons set forth for the claim 13.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (hereinafter Lee)(US 6,336,137) in view of Subramaniam et al. (hereinafter Subramaniam)(US 6, 081, 900).

Referring to claims 25 and 26,

Keeping in mind the teachings of the reference Lee as stated above, the reference fails to teach the act of generating the requested content further comprises an act of changing the one or more resource identifiers included an the requested content to correspond with the first communication protocol and, wherein the first communication protocol is HTTPS and the second communication protocol is HTTP, wherein the act of changing the one or more resource identifiers further comprises an act of changing an "HTTP" portion of a resource identifier to "HTTPS". The reference Subramaniam addresses the question as posed; " The secure network is configured with authentication software and supporting data to allow direct access to the target server by a user only after the user is authenticated by the user authentication system.

Typically, the user could readily log onto the network from an internal client at work, and the security questions addressed by the invention arise because the user wishes to log on through an external client at home or in the field rather than an internal one at work."(col.3, lines 33-40). The reference, thus discloses the solution, "The uniform resource locator (URL) transformer modifies non-secure uniform resource locators in data being sent from the target server (back-end server) to the client by replacing them with corresponding secure URLs to promote continued use of secure sockets layer communication. The URL transformer is an "SSL-izer". For instance, the URL transformer may replace instances of "http" which refer to locations inside the secure network 100 by corresponding instances of "https" which refer to the same locations. The modifications to the data promote continued use of a secure connection such as an SSL connection. An URL transformer may be located on the border server (front-end server), on the target server (back-end server), or both. If the URL transformer is located on the target server, the system may include tunneling software for tunneling secure data (which was transformed into secure form at the target server) between the client and the target server through the border server."(col.3, lines 41-57). Therefore, it would have been obvious for one in ordinary skill in the art at the time the invention was made to modify Lee by incorporating Subramaniam's URL transformer that can be on back-end server(the target server). Thus, the solution is provided by Subramaniam by acknowledging that although a wide variety of tools and techniques relating to networks and/or security are known, it has not previously been known how to combine them to provide clients outside a secure network perimeter with sufficiently convenient, efficient,

and secure access to Web pages stored on servers within the secure network. (col.2, lines 41-46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp
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